

## WHAT IS CLAIMED IS:

1. A data synchronization system, sited in a terminal thereof for synchronizing data in a server thereof through a network, the data comprising a characteristic data and a content data, said data synchronization system comprising:
  - a terminal receiver for receiving the characteristic data of the data from the server through the network and for receiving the content data corresponding to the characteristic data from the server through the network ;
  - a characteristic data difference distinguishing module for comparing the characteristic data from the server with the characteristic data in the terminal to further generate a first difference ;
  - an extractor for comparing the characteristic data in the server corresponding to the first difference with the characteristic data in the terminal and for choosing the characteristic data in the server in accordance with a predetermined condition;
  - a content data difference distinguishing module for comparing the content data from the server received by the terminal receiver with the content data in the terminal and for further generating a first content data difference ; and
  - a composing module for constituting the first content data difference with the content data in the terminal to generate a content renew data, for constituting the characteristic data in the terminal with the first difference to generate an index renew data, and further for constituting the content renew data with the index renew data to generate a first renew data.
2. The data synchronization system according to Claim 1 further comprising :
  - an editing module for editing the first renew data into a second renew data and for editing the characteristic data corresponding to the second renew

data, wherein the characteristic data difference distinguishing module compares the characteristic data of the second renew data with the index renew data to further generate a second difference, wherein the content data difference distinguishing module compares the content data of the second renew data with the content renew data to further generate a second content data difference ; and

a terminal transmitting module for transmitting the second content data difference and the second difference to the server through the network.

3. The data synchronization system according to Claim 2, wherein the server further comprises :

a server receiver for receiving a second content data difference and a second difference in the terminal through the network ; and

a composing module for constituting the second content data difference and the second difference from the terminal with the content data and the characteristic data in the server to further generate a server renew data.

4. The data synchronization system according to Claim 1, wherein the characteristic data comprise a file name, a recording time, a file size, a file type, a file abstract, a file writer, a full text characteristic code, and a content characteristic code.

5. The data synchronization system according to Claim 4, wherein the predetermined condition is to compare these file names of characteristic data between the terminal and the server so as to find different file names.

6. The data synchronization system according to Claim 5, wherein the exactor further compares and finds other characteristic data difference in the server and the terminal depending on another predetermined condition when the file in the server has the same file name in the terminal.

7. The data synchronization system according to Claim 6, wherein the

predetermined condition further comprises “distinguishing the newer file depending on the recording time of the file”; that is, the exactor getting the same file name content data in the server with a latest recording time.

8. The data synchronization system according to Claim 7, wherein the exactor exacts the content data corresponding to a unique content characteristic code.
9. The data synchronization system according to Claim 6, wherein the predetermined condition further comprises “finding a priority of the file writer and choosing the content data in the server corresponding to the file writer”.
10. The data synchronization system according to Claim 6, wherein the predetermined condition further comprises “to choose the file recorded during a predetermined period time”.
11. The data synchronization system according to Claim 6, wherein the exactor exacts these first content data difference and the first difference from the predetermined file document in the server and in the terminal.
12. A data synchronization system, for synchronizing data in a server and a terminal through a network, the data comprising a characteristic data and a content data, said data synchronization system comprising:
  - a server receiver, sited in the server for receiving characteristic data of the data in the terminal through the network ;
  - a characteristic data difference distinguishing module, sited in the server for comparing the characteristic data in the server with the characteristic data from the terminal to further generate a first difference ;
  - an exactor, sited in the server for comparing the characteristic data in the server corresponding to the first difference with the characteristic data in

the terminal and for choosing the characteristic data in the server in accordance to a predetermined condition ;

a server transmitting module, sited in the server for transmitting the first difference and the content data corresponding to the characteristic data to the terminal through the network ;

a terminal receiver, sited in the terminal for receiving the first difference and the content data through the network ;

a content data difference distinguishing module, sited in the terminal for comparing the content data from the server received by the terminal receiver with the content data in the terminal and for further generating a first content data difference ; and

a composing module, sited in the terminal for constituting the first content data difference with the content data in the terminal to further generate a content renew data, for constituting the characteristic data in the terminal with the first difference to generate an index renew data, and for further constituting the content renew data with the index renew data to generate a first renew data so as to synchronize the first renew data in the terminal with the data in the server.

13. The data synchronization system according to Claim 12 further comprising :

an editing module, sited in the terminal for editing the first renew data into a second renew data and for editing the characteristic data corresponding to the second renew data, the characteristic data difference distinguishing module comparing the characteristic data of the second renew data with the index renew data to generate a second difference, the content data difference distinguishing module comparing the content data of the second renew data with the content renew data to generate a second content data difference ; and

a terminal transmitting module, sited in the terminal for transmitting the second content data difference and the second difference to the server through the network so as to synchronize the second renew data in the terminal with the data in the server.

14. The data synchronization system according to Claim 13, wherein the server receiver receives the second content data difference and the second difference in the terminal through the network, the server further comprising :

a composing module for constituting the second content data difference from the terminal and the second difference from the terminal with the content data in the server and the characteristic data in the server so as to generate a server renew data for synchronizing the server renew data in the server with the second renew data in the terminal.

15. The data synchronization system according to Claim 12, wherein the characteristic data comprises a file name, a recording time, a file size, a file type, a file abstract, a file writer, a full text characteristic code, and a content characteristic code.

16. The data synchronization system according to Claim 15, wherein the predetermined condition is “comparing the file name of characteristic data between terminal and server and further finding the different file name”.

17. The data synchronization system according to Claim 16, wherein the exactor further compares and finds other characteristic data difference in the server and the terminal depending on another predetermined condition when the file name corresponding to the file in the server exists in the terminal.

18. The data synchronization system according to Claim 17, wherein the predetermined condition further comprises “distinguishing a latest file

depending on the recording time of the file, and the exactor exacting the same file name content data in the server with a latest recording time”.

19. The data synchronization system according to Claim 18, wherein the exactor exacts the content data corresponding to a unique content characteristic code.
20. The data synchronization system according to Claim 17, wherein the predetermined condition further comprises “finding a priority of file writer and choosing the content data in the server corresponding to the file writer”.
21. The data synchronization system according to Claim 17, wherein the predetermined condition further comprises “choosing the file recorded during a predetermined period time”.
22. The data synchronization system according to Claim 17, wherein the exactor exacts these characteristic data from the predetermined file document in the server and in the terminal.
23. A data synchronization method for synchronizing data in a server and a terminal through a network, the data comprising a characteristic data and a content data, said data synchronization method comprising:
  - exacting the characteristic data from the server and the characteristic data from the terminal ;
  - comparing the characteristic data from the server with the characteristic data from the terminal to generate a first difference ;
  - comparing the characteristic data in the server corresponding to the first difference with the characteristic data in the terminal, and choosing characteristic data in the server in accordance to a predetermined condition ;
  - transmitting the content data corresponding to the characteristic data chosen

to the terminal through the network ;

comparing the content data from the server with the content data in the terminal, and generating a first content data difference ;

constituting the first content data difference with the content data in the terminal to generate a content renew data, and constituting the characteristic data in the server with the first difference to generate an index renew data ; and

constituting the content renew data with the index renew data to generate a first renew data so as to synchronize the first renew data in the terminal with the data in the server.

24. The data synchronization method according to Claim 23, further comprising the steps of :

editing the first renew data becoming to a second renew data, and editing the characteristic data corresponding the second renew data ;

comparing the characteristic data of the second renew data with the index renew data to generate a second difference, and comparing the content data of the second renew data with the content renew data to generate a second content data difference ; and

transmitting the second content data difference and the second difference to the server through the network for further synchronizing the second renew data in the terminal with the data in the server.

25. The data synchronization method according to Claim 24, further comprising steps of :

receiving a second content data difference and a second difference from the terminal through the network ; and

constituting the second content data difference and the second difference with the content data in the server and the characteristic data in the server

to generate a server renew data so as to synchronize the server renew data in the server with the second renew data in the terminal.

26. The data synchronization method according to Claim 23, wherein the characteristic data comprises a file name, a recording time, a file size, a file type, a file abstract, a file writer, a full text characteristic code, and a content characteristic code.
27. The data synchronization method according to Claim 26, wherein the predetermined condition is “comparing the file name of characteristic data between the terminal and the server, and finding the different file name”.
28. The data synchronization method according to Claim 27, further comprising a step of comparing and finding other characteristic data difference in the server and the terminal depending on the predetermined condition when the file name corresponding to the file in the server exists in the terminal.
29. The data synchronization method according to Claim 28, wherein the predetermined condition further comprises “distinguishing a latest file depending on the recording time of the file, and exacting the same file name content data in the server with the latest recording time.
30. The data synchronization method according to Claim 29, wherein the content data exacted is the unique content characteristic code.
31. The data synchronization method according to Claim 28, further comprising step of finding a priority of file writer, and choosing the content data in the server corresponding to the file writer.
32. The data synchronization method according to Claim 28, wherein the predetermined condition further comprises “choosing the file recorded during a predetermined period time”.



33. The data synchronization method according to Claim 28, wherein the predetermined condition further comprises “comparing and finding these first content data difference and the first difference within the predetermined file document in the server and in the terminal”.